GENERAL			
This document is under the Change Management Control Policy.			
Description	Service Level Agreement for Computing Sector IT Services Foundation Agreement on which all SLA/OLAs are based.		
Purpose	This document outlines the service levels, responsibilities and terms and conditions related to all base IT Services		
Applicable to	*All processes*		
Supersedes	*N/A*		
Document Owner	Computing Sector Service Level Manager	**Owner Org**	*Computing Sector*
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V1.0	10/04/2010	Robert D. Kennedy		Uniform v1.0 Drafts
V2.0	2/8/2012	Jack Schmidt		Updated Sector information
V3.0	7/21/2012	Jack Schmidt		Conversion to template; removed Remedy references; removed VIP users-in SD SLA

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VERSION HISTORY

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V3.1	11/12/2012	Jack Schmidt		Removed signature section, added standard support disclaimer, added Service Offering report information
V3.2	10/15/2013	Brian McKittrick		1.1 – Modified normal operations statement to include suspension of SLAs during continuity situations. 1.2 - Added statement to defer requests if an interruption of service is needed. 4 / 5 - Updated security statement and service request procedures to reflect reality. 5.5 - Updated Service Breach procedure to accurately reflect handling process. Throughout - Corrected and updated grammar where needed.
V3.3	September 2014	Brian McKittrick		Yearly Review -Corrected DocD number on page header. -Updated Version

VERSION HISTORY				
Version	**Date**	**Author(s)**	**Approved by (if needed)**	**Change Summary**
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1 INTRODUCTION

1.1 EXECUTIVE SUMMARY

The goal of the Foundation Service Level Agreement (Foundation SLA) is to collect in one place the definitions and common features of Computing Sector Service Level Agreements. The Foundation SLA has two objectives:

- Set common service expectations with minimal document repetition to form a foundation for all other SLAs to re-use,
- Serve as a broad minimal SLA for all Computing Sector IT services and their customers while detailed Service Level Agreements are drafted and negotiated.

The service levels defined in this agreement are in effect during normal operations, in the case of a continuity situation they may change or be suspended.

1.2 KEY DEFINITIONS

Many of the definitions below come from ITIL, a body of best practices in IT Service Management. For more ITIL terminology, please refer to this online glossary.

1.2.1 CUSTOMER, Owner, AND USER ROLES

The **Customer** is the recipient of a service, typically the role that negotiates and pays for a service on behalf of Users. For the purposes of this document, Customer usually refers to the organization which requests and receives a service for its members.

The **Owner** is responsible for delivering and supporting a service for Users.

The **User** is typically an individual within a Customer organization who uses the service on a regular basis. A User, however, may also be a service maintained by the Customer such as a data reconstruction service which uses the Provider’s service for its own implementation.

1.2.2 HIERARCHIC AND FUNCTIONAL ESCALATION

In **Hierarchic Escalation**, a ticket is passed from the current point of contact up the management chain to someone with greater authority.

In **Functional Escalation**, the ticket is passed from the current point of contact to someone with greater technical expertise.

1.2.3 INCIDENTS AND REQUESTS

“An **Incident** is any event which is not part of the standard operation of a service which causes, or may cause, an interruption to, or a reduction in the quality of that service,” A **Critical Incident** is the highest priority incident, one in which a highly visible and important service depended upon by many users is no longer operable and there is no acceptable work-around. The exact definition of what constitutes a critical incident may be clarified by each service.

A **Request**, in a service management context, is a request for information, a standardized change to a service or access to a service. Unlike an incident, a request usually does not involve the interruption or threat of interruption of an already provisioned service.

Should the execution of a request either require an interruption or represent a significant risk to an already provisioned service, then the Computing Sector in conjunction with the Service Provider may elect to defer the delivery of the request to the next scheduled maintenance window for the service.

1.2.4 RESPONSE AND RESOLUTION TIMES

The **Response Time** is measured from when the ticket is entered into the tool (by the user or the Service Desk personnel) to when the ticket status is set to “Work in progress”. This is the amount of time required to acknowledge the ticket. Time is only counted during the on-hours support period for a service.

The **Resolution Time** is measured from when the ticket is entered into the tool (by the user or the Service Desk personnel) to when the ticket status is set to “resolved” in the tool. Time spent in the “pending” state is not included in the resolution time. If a ticket is re-opened, then time continues to be counted until the ticket is again set to “resolved”. Time is only counted during the on-hours support period for a service. This reflects the amount of time required to resolve, but not necessarily close, the ticket. Resolution means that a service is restored (if the ticket reports an incident) or a request fulfilled (if the ticket contains a request). After resolution, as a separate step, the user is asked whether the resolution is satisfactory and if the ticket may be closed. Time is only counted during the on-hours support period for a service.

1.2.5 SERVICE RESTORATION AND REQUEST FULFILLMENT

Service Restoration refers to the resolution of an Incident. Restoration of a service is judged from the user view of the service that is delivered. An incident is resolved by either the provider solving the underlying error in the service or the provider delivering an acceptable work-around to the user while the underlying error is investigated. A service is restored so long as the user may continue to do their work which depends upon that service.

Request Fulfillment refers to the fulfillment of a Request, which occurs when the requested information is delivered, the requested change is made in the production system, or the requested access to a service is made available to the user.

Since restoring established services takes precedence over provisioning new services, service restoration tends to be treated with greater urgency than request fulfillment.

1.2.6 STANDARD SUPPORT HOURS

The following are default definitions for service support hours to encourage uniformity:

- **8 x 5** Monday through Friday, 8am – 5pm U.S. Central Time, not including Fermilab work holidays.
- **12 x 7** Every day, 8am – 8pm U.S. Central Time, including Fermilab work holidays. The response time however may be slower on weekends and Fermilab work holidays, which should be clarified by those services offering this support.
- **24 x 7** Every day, all of the time. The response time however may be slower on weekends and Fermilab work holidays, which should be clarified by those services offering this support.

Service Response and Resolution Times are impacted by the stated service support hours. An 8 x 5 service with 8 hour response time is in effect promising to respond within 8 business hours (weekdays, 8am – 5pm, non-holidays), not 8 wall-clock hours. A ticket entered for this service on Friday at 2pm may not be responded to until Monday 1:30pm.

2 SERVICE OVERVIEW

The Foundation Service Level Agreement (Foundation SLA) serves as a broad minimal SLA for all Computing Sector IT services and their customers while detailed Service Level Agreements are drafted and negotiated

3 RESPONSIBILITIES

The Customer, Users, and Providers are expected to abide by applicable Fermilab policies, including but not limited to:

- Fermilab Policy on Computing
- Guidelines for Incidental Computer Usage
- Fermilab Human Rights Policy
- Fermilab Director's Policy Manual

4 COMPUTER SECURITY CONSIDERATIONS

Computer Security incidents are to be reported to the FNAL Service Desk as defined by the Fermi Incident Response (FIR) Procedure located at http://security.fnal.gov.

5 SERVICE SUPPORT PROCEDURE

5.1 REQUESTING SERVICE SUPPORT

Access to all IT services may be requested through the Service Desk, via servicedesk.fnal.gov or by phone (630-840-2345). More information about requesting service can be found in the Self Service at servicedesk.fnal.gov.

5.2 STANDARD ON-HOURS SUPPORT

5.2.1 HOURS

All Computing Sector IT services shall maintain at least 8 x 5 On-Hours support.

5.2.2 SUPPORT DETAILS

Critical incident response requires a phone call to the Service Desk (630-840-2345). Users cannot initiate critical incident response with the current tool interface.

The requestor or proxy should be available for consultation after reporting an incident or submitting a request, and will provide their preferred contact information in the service ticket or phone call to facilitate response by the Service Desk and the service support group involved. If the requestor or proxy is not available, then the assigned service provider may not be able to query important information or coordinate computer access in order to restore service or fulfill a request in a timely fashion. If a service provider is waiting to contact a requestor or proxy, the associated ticket will be placed into the "pending" state, and time spent in "pending" is not counted against Response or Resolution time targets.

5.3 STANDARD OFF-HOURS SUPPORT

5.3.1 HOURS

While many Computing Sector IT services will offer some form of Off-Hours support, not all do. Please see the appropriate service definition and service level agreement for details. Those services which do offer Off-Hours support shall offer enhanced support for critical incidents.

5.3.2 SUPPORT DETAILS

Computer security incidents always qualify for Off-Hours critical incident response.

Off-Hours support is provided via phone (630-840-2345) for critical incidents only. Off-Hours paging of service experts currently requires this phone call approach to report an incident. Individual services may have a specific definition of what other incidents qualify for off-hours versus the next business day response.

5.4 SPECIAL SUPPORT COVERAGE

The service will provide in this section a description of the kinds of special support coverage that may be arranged, if any, and how this may be negotiated ahead of time.

5.5 SERVICE BREACH PROCEDURES

Breaches in service are defined as not meeting agreed to commitments over a month's time. Breaches are recorded, classified and reviewed on a monthly basis utilizing the Service Level Management process. Breaches and opportunities for improvement are available on the Monthly Service Performance Report.

6 SERVICE TARGETS AND PRIORITIES

6.1 RESPONSE TIME

The response time target for incident and request tickets for CS services is referenced in the table below. CS service providers will meet each of these targets for 90% of tickets assigned to them. Please see the appropriate service level agreement for details.

6.2 RESOLUTION TIME

The resolution time target for incident tickets for CD services is referenced in the table below. There is no resolution time target across services for requests due the wide variety of requests being handled. Each service shall provide some guidance on the expected resolution time for the most frequent requests to help set user expectations. Please see the appropriate service level agreement for details.

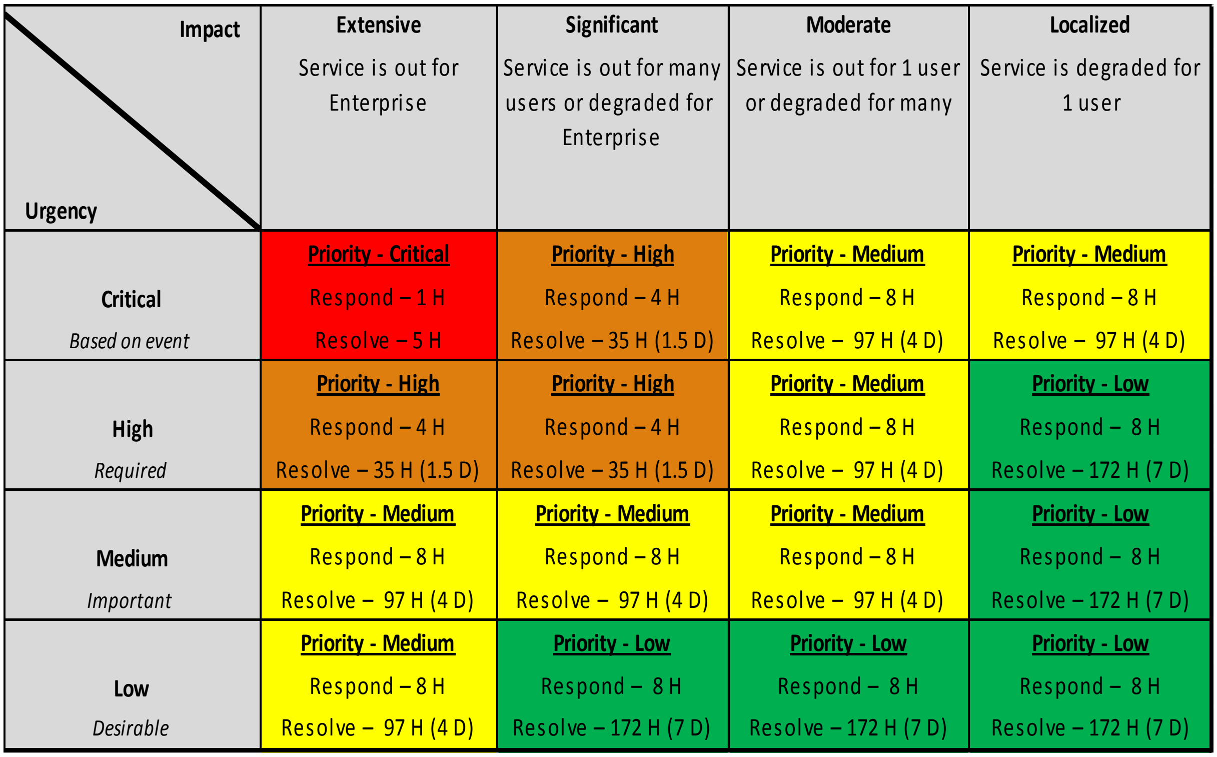
6.3 INCIDENT AND REQUEST PRIORITIES

The **Priority** for incidents and requests is determined by a combination of the **Impact** and the **Urgency**. The Impact is driven by how many people affected, and whether there is a serious business or financial loss at risk. The Urgency is driven by whether the user can do other tasks or use a work-around for a time, or whether a time-critical task is blocked.

The priority assigned any ticket may be re-adjusted by service personnel after consultation with the user.

Adjusting the incident or request ticket priority is necessary to allow the complete context of an incident or request to be taken into account. A "laptop malfunctioning" may be considered at most medium priority without context, and this may be the initial priority setting. From the text description or after consulting with the user, the service personnel may learn that the "Division Financial Manager's laptop malfunctioning during the budget season" or "scientific conference presenter's laptop malfunctioning on the day before leaving to the conference" is a more complete statement of the incident which may be considered much higher priority than normal, perhaps even critical priority. Until the complete picture is understood by both service personnel and the user, the priority cannot be set appropriately.

CS Service Providers shall respond to an incident according to the following priority table:



Impact Urgency	**Extensive** Service is out for Enterprise	**Significant** Service is out for many users or degraded for Enterprise	**Moderate** Service is out for 1 user or degraded for many	**Localized** Service is degraded for 1 user
Critical *Based on event*	**Priority - Critical** Respond – 1 H Resolve – 5 H	**Priority - High** Respond – 4 H Resolve – 35 H (1.5 D)	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)
High *Required*	**Priority - High** Respond – 4 H Resolve – 35 H (1.5 D)	**Priority - High** Respond – 4 H Resolve – 35 H (1.5 D)	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)	**Priority - Low** Respond – 8 H Resolve – 172 H (7 D)
Medium *Important*	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)	**Priority - Low** Respond – 8 H Resolve – 172 H (7 D)
Low *Desirable*	**Priority - Medium** Respond – 8 H Resolve – 97 H (4 D)	**Priority - Low** Respond – 8 H Resolve – 172 H (7 D)	**Priority - Low** Respond – 8 H Resolve – 172 H (7 D)	**Priority - Low** Respond – 8 H Resolve – 172 H (7 D)

Figure 1 Incident and Request Response, Incident Resolution

Note that the “hours” specified in the table are driven by the On-Hours Support defined for the service in question. Incident ticket response within 8 hours for a service with 8 x 5 support corresponds to response within 1 business day. Response within 8 hours for a service with 24 x 7 support corresponds to response within 1 calendar days.

6.4 CRITICAL INCIDENT HANDLING

A critical incident is the highest priority incident, one in which a highly visible and important service depended upon by many users is no longer operable and there is no acceptable work-around. In addition to the faster response expectations listed in the priority/response table, critical incidents move to the front of the incident report queue and may be handled by a distinct Critical Incident Management process.

Critical incident response requires a phone call to the Service Desk (630-840-2345).

6.5 DEFAULT ESCALATION PATH

Unless stated otherwise, for all CS services, escalation due to response time agreement breaches is hierarchic escalation, not functional escalation. This insures that response time-driven escalation is towards a single accountable role, the Service Manager, rather than possibly moving endlessly around an escalation loop from one service provider to another.

***Reminder**: The service levels defined in this agreement are in effect during normal operations, in the case of a continuity situation they may change.*

6.6 Service Offerings with 24x7 components

There are components of a service offering that are available for 24 x 7 support. These components are negotiated and the SLAs are tracked accordingly.

6.7 Availability

Support Availability – The schedule that defines the hours in which a service provider will respond to and triage an incident.

Examples of typical support schedules:

- **8 to 17 by 5 - Support is available Monday through Friday 8:00a.m. CT to 5:00p.m. CT, excluding holidays.**
- **24 x 7 – Support is available all the time.**

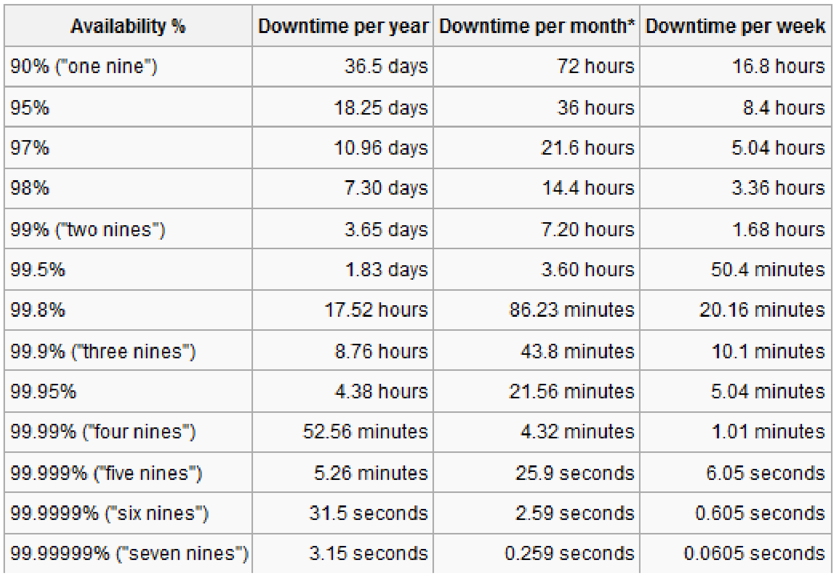
Service Availability – The system is usable when expected. System availability is measured as an uptime percentage during the expected service availability window. Service availability should be set realistically, based on the implementation of all components of service offering.

An Outage implies system unavailability and negatively impacts availability measurements. An Outage during an ‘agreed to maintenance window’ does not impact the availability measurement.

For applicable Service Offerings the following will be defined:

- **Maintenance Window –** a negotiated pre-approved down time to perform system maintenance.
- **Degradation –** Symptoms or threshold where service users are impacted, but users can continue using the service with an excitable workaround**.**
- **Outage –** The service is not available when expected.

The Computing Sector is working to set realistic availability targets that are in line with our customer’s needs. When services are created or modified, system implementation will be considered and a target will be identified.



Availability %	Downtime per year	Downtime per month*	Downtime per week
90% ("one nine")	36.5 days	72 hours	16.8 hours
95%	18.25 days	36 hours	8.4 hours
97%	10.96 days	21.6 hours	5.04 hours
98%	7.30 days	14.4 hours	3.36 hours
99% ("two nines")	3.65 days	7.20 hours	1.68 hours
99.5%	1.83 days	3.60 hours	50.4 minutes
99.8%	17.52 hours	86.23 minutes	20.16 minutes
99.9% ("three nines")	8.76 hours	43.8 minutes	10.1 minutes
99.95%	4.38 hours	21.56 minutes	5.04 minutes
99.99% ("four nines")	52.56 minutes	4.32 minutes	1.01 minutes
99.999% ("five nines")	5.26 minutes	25.9 seconds	6.05 seconds
99.9999% ("six nines")	31.5 seconds	2.59 seconds	0.605 seconds
99.99999% ("seven nines")	3.15 seconds	0.259 seconds	0.0605 seconds

SERVICE AVAILABILITY– THE SYSTEM IS USABLE WHEN EXPECTED
System availability is measured as an uptime percentage during the expected service availability window. An Outage implies system unavailability and negatively impacts availability measurements. *An Outage during an 'agreed to maintenance window' does not impact the availability measurement.*

- Maintenance Window – [Hour range and day]
- Outage – [all users at the lab are unable to access X or use a critical feature]
- Degradation – [a portion of X users are unable to access X or use a critical feature. This could also mean that X is not available for more than 30% of its users]

7 CUSTOMER REQUESTS FOR SERVICE ENHANCEMENT

The service will provide in this section a description of how customer requests for service enhancement are to be made. A description should cover more than just the initial service request submission, but also describe how requests for enhancement are managed, prioritized, and progress is communicated back to requestors over time.

8 SERVICE MEASURES AND REPORTING

The Service Offering dashboard is available in the service desk application under the report section. The dashboard measures each offering for each service against the incident response and resolution times and request response times defined in section 6.3 of this document. The dashboard shows performance trending for the Service Offerings on a weekly/monthly/yearly basis.

The Service Offering dashboard is available to Service Owners and Providers, Business Analysts, Process Owners and Senior IT Management.

Service Level breaches are identified in the service offering dashboard and are monitored by the Service Owners, Incident Manager and Service Level Manager.